## East Middle School's "Green School Challenge" Report

Our Green Team built a three-stage compost bin for our garden and will collect food waste from the cafeteria to put in the bins. Our Green Team is comprised of students from garden club, food club, recycling club, and others who were interested. The goal for our green school challenge is to reduce food waste in the cafeteria and to increase the health of our garden soil so that we can grow more plants. The food that is usually wasted at our school will now go towards creating compost that gives our plants the nutrients that they need. This project will save resources by creating an awareness of food waste in our school and by using natural, home-made soil amendments for our garden.

In February and March, our Green Team built a three-stage compost bin and planned out how we will collect the compost once the snow melts. Once a month during lunchtime, students from our Food Club and Garden Club will collect food waste from the cafeteria and put it in the first bin. Garden Club students and science classes will measure the compost temperature and turn it into the next bin when it is ready. In 1-3 months it will become rich compost which will be used to add nutrients to the soil in our garden. To educate others, we will make presentations to target audiences such as recycling club, media club, LOL club, food club, student counsel, and classes. We will make fliers to post around the school to inform students about collecting compost materials. We will create a collection bin that is bright and stands out so students and staff will see it and use it. Food Club students will supervise the bin to make sure the right food goes into it. We will start collecting on Earth Day!

Currently, students throw out an average of seven 55-gallon trash bags full of waste each day at lunch. A lot of this waste is made up of food scraps. We will measure the amount of food scraps that we receive on our first collection day and also the amount of trash bags that are filled with waste that day. We think that we can eliminate up to two trash bags of waste on the days that we collect compost. We will also educate students about only taking the amount of food that they can eat! We want to make sure they waste less food in the first place, and that the food they do have left over turns to compost.

The garden at East Middle School was started two years ago. Growing plants was quite successful our first year. Last year, however, growing food did not turn out as well. The plants were not as healthy and we didn't harvest as much produce. Adding compost to the soil will improve the situation. Last fall, we tested the soil in our garden and found that the soil was low in Nitrogen and had a low Cation Exchange Capacity. Adding nutrient rich organic matter like our compost will increase the soil's ability to hold on to nutrients like Nitrogen for plant use. We will test the soil again next fall to see if it has improved. Making our own compost means that we don't have to buy it from another source and that we can be sure it is all natural.

This project "greens" our school because it reduces the amount of food that we waste and it improves our garden without using outside inputs for our soil. The project also teaches students about sustainability, recycling, and growing food. Improving the soil in our garden is also important because of its impact on our community. We donate the food we grow to the Butte Rescue Mission and the Butte Emergency Food Bank. The project will keep going by keeping both 7<sup>th</sup> and 8<sup>th</sup> graders involved in the Garden Club and Food Club. The 8<sup>th</sup> graders can encourage the 7<sup>th</sup> graders to stay involve.